

SN 09/824,074

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re patent application of: Dovey et al.

Serial No.: 09/824,074

Group Art Unit: 3746

Filed: April 2, 2001

Examiner: Gray, Michael Kuhn

Attorney Docket: 99B156

Title: Reciprocating Machines

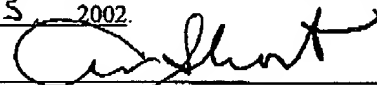
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Ann Short

AMENDMENT

In response to the Office Action dated May 15, 2002 (Paper No. 5), please amend the above-referenced application as follows:

In the Specification

Please rewrite the paragraph beginning on page 3, line 8 as follows:

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"As shown in the Figure, a vibration sensor 3, for example a piezoelectric device, is mounted on a machine in the form of a pump, such that any end collision of reciprocation piston 5 is detected, for example on one end 6 of a pump cylinder 1. Vibration sensor 3 is electrically/electronically connected to a controller 2 in the form of an electronic circuit, for example a micro-processor. The controller 2 is electrically/electronically linked to a variable voltage driver 4 including an electromagnet which is itself mechanically linked to the piston 5 of the pump cylinder 1, to form a closed loop control system. The controller 2 interconnects the vibrator sensor 3 and the driver 4. The vibration sensor 3 can be mounted to an end 7 of the pump cylinder 1 opposite to that which the sensor 3 is shown mounted in the Figure."

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